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SWITCH DEVICE
[Suichi sochi]

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TITLE	(54):	SWITCH DEVICE
FOREIGN TITLE	[54A]:	SUICHI SOCHI

Specification

1. Title of the Invention

SWITCH DEVICE

2. Claims

A switch device, wherein the switch device accommodates a switch main body, wherein at least one of a plurality of mounting portions attached to the outer periphery is furnished with a case to which an operating body is attached for operating the switch main body, and wherein a plank cover is furnished for covering the empty mounting portions or the mounting portions other than the ones to which an operating body has been attached.

3. Detailed Description of the Invention

(Industrial Field of Application)

The present invention relates to a switch device and, more specifically, to a switch device in which a plurality of mounting portions for attaching the operating body are furnished with a case.

(Prior Art)

FIG 5 is a switch device of the prior art disclosed in Design No. 575079, and FIG 6 is a cross-sectional view from IV-IV in FIG 5.

(Problem to be Solved by the Invention)

In these drawings, (1) is a case consisting of a base (2) and a cover (3) for accommodating the switch main device (not shown). Three button insertion holes (3a) are formed in the cover (3). (4) is a push button exposed to the outside from a button insertion hole (3a), and (5) is a mounting fixture.

A switch device of the prior art is embedded in a wall, and push buttons (4) are pressed to operate the switch main body.

If, for example, there are only two push buttons (4) in a switch device of the prior art, one of the button insertion holes (3a) is empty and this detracts from the external appearance. A different type of case (1) has to be made based on the number of push buttons (4) and this increases costs.

The purpose of the present invention is to provide a switch device that solves this problem by providing a switch device that reduces costs by using the same case regardless of the number of operating bodies without detracting from the external appearance.
(Means of Solving the Problem)

In the switch device of the present invention, the empty mounting portions without an operating body attached are covered by a plank cover.

(Operation)

By covering the empty mounting portions with a plank cover, a common case can be used regardless of how many mounting bodies are attached to mounting portions.

(Working Examples)

The following is an explanation of working examples of the present invention with reference to the drawings. FIG 1 is a side view of a working example of the present invention. FIG 2 is an exploded perspective view of part of FIG 1.

In these drawings, (6) is a cover consisting of a base (7) and a cover (8) for accommodating a switch main body (not shown). Three mounting portions (9) demarcated by the dotted lines in FIG 2 are formed in the outer periphery of the cover (8), and each one of these mounting portions (9) has a through-hole (9a) and an engaging hole (9b).

Here, (10) denotes two switching bodies used to operate the switch main body attached to two mounting portions (9). A switching body (9) consists of a top cover (11), button (12) and spring (13). A protrusion (11a) on the top cover (11) fits into the engagement hole (9b). A flat plank cover (14) is attached to the mounting portion (9) in the middle without an operating body (10) attached. The plank cover (14) has a plank cover protrusion (14a) identical to the protrusion (11a) in the top cover (11). It is fitted into the engagement hole (9b) same as the operating body (10).

In this switch device, there are three mounting portions (9). Because only two operating bodies (10) are used, a plank cover (14) with a plank cover protrusion (14a) is attached to the empty mounting portion (9). As a result, the empty mounting portion does not detract from the external appearance and the case (6) can be used as is.

If three operating bodies (10) are to be used as shown in FIG 3, another operating body (10) is added instead of the plank cover (14) in FIG 1. If only one operating body (10) is mounted, two plank covers (14) are used as shown in FIG 4.

By covering empty mounting portions (9) with plank covers (14), the same case (6) can be used regardless of the number of operating bodies (10) in the mounting portions (9). This reduces costs.

In the working examples, the case (6) had three mounting portions (9). However, any number of mounting portions (9) can be used provided there are at least two. In the same working examples, three mounting portions (9) were lined up in a row. However, the mounting portions can also be arranged differently.

The shape and mounting method for the plank cover (14) are not limited to the working examples.

The switch device in the working examples used push button switches. However, another type of switch device such as one with changeover switches can be used on the present invention. The operating bodies (10) are also not limited to the configuration shown in the working examples.

(Effect of the Invention)

[18] Because the empty mounting portions not containing operating bodies are covered by plank covers in the switch device of the present invention, the same case can be used regardless of the number of operating bodies without detracting from the external appearance and manufacturing costs can be reduced.

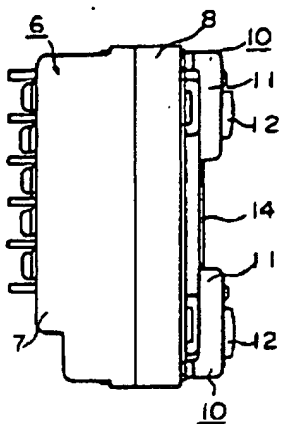
4. Brief Explanation of the Drawings

FIG 1 is a side view of a working example of the present invention. FIG 2 is an exploded perspective view of part of FIG 1. FIG 3 is a side view of another working example of the present

invention. FIG 4 is a side view of yet another working example of the present invention. FIG 5 is a front view of an example of the prior art. FIG 6 is a cross-sectional view from VI-VI in FIG 5.

In the drawings, (6) is a case, (9) is a mounting portion, (10) is an operating body, and (14) is a plank cover. Identical components are denoted by the same numbers in the drawings.

FIG 1



6: Case
10: Operating Body
14: Plank Cover

FIG 2

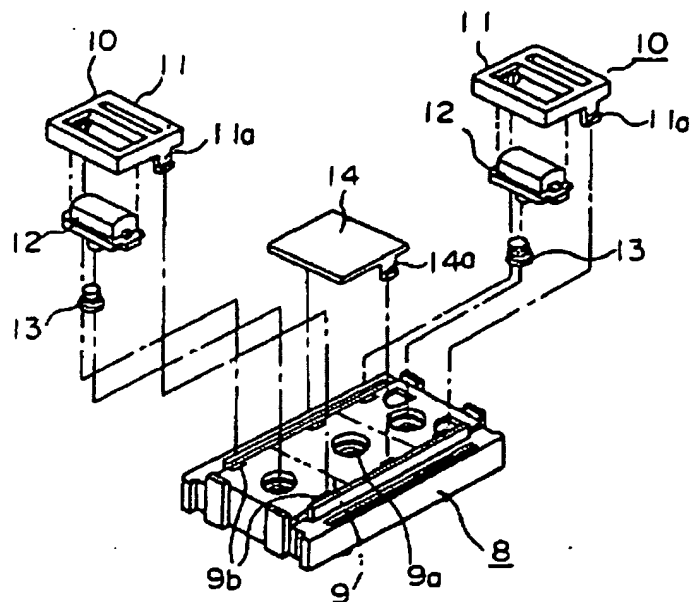


FIG 3

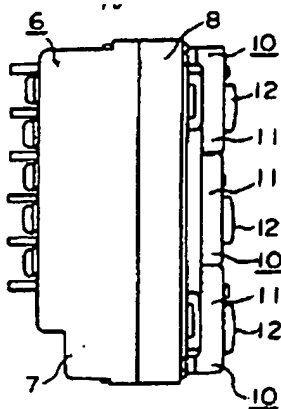


FIG 4

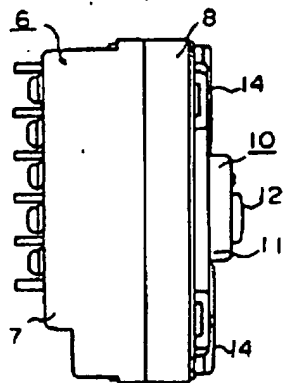


FIG 5

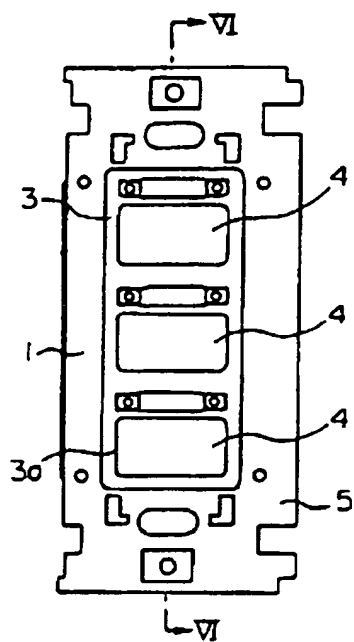


FIG 6

